

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for enhanced uplink data transmission, comprising:
independently generating a transport channel for each transmission mode, each transport channel having an associated transmission time interval (TTI);
multiplexing the generated transport channels on a selected TTI basis to form a composite transport channel, the selected TTI being selected from one of the TTIs associated with the independently generated transport channels, the selected TTI being the lowest TTI of the independently generated transport channels; and
mapping the composite transport channel onto a physical channel.
2. (Canceled)
3. (Original) The method of claim 1, wherein the independently generating step generates first and second transport channels having first and second TTIs, and the second TTI is a multiple of the first TTI.
4. (Original) The method of claim 3, wherein the transmission mode associated with the first transport channel is a scheduled transmission mode and the transmission mode associated with the second transport channel is an autonomous transmission mode.
5. (Original) The method of claim 4, wherein the first TTI is 2ms and the second TTI is 10ms.
6. (Original) The method of claim 1, wherein the generating step independently generates transport channels for more than one transmission mode.

7. (Original) The method of claim 6, wherein the TTI of each transmission mode is one of a sub-multiple and multiple of 10 ms.
8. (Original) The method of claim 1, wherein the independently generating step generates first and second transport channels having first and second TTIs, the transmission mode associated with the first transport channel is a scheduled transmission mode and the transmission mode associated with the second transport channel is a autonomous transmission mode.
9. (Original) The method of claim 6, wherein the first TTI is 2ms and the second TTI is 10ms.
10. (Original) The method of claim 1, wherein the mapping step maps the composite transport channel onto the physical channel on the selected TTI basis.
11. (Currently Amended) An apparatus for enhanced uplink data transmission, comprising:
at least two control units each independently generating a transport channel for a different transmission mode, and each transport channel having an associated transmission time interval (TTI);
a transport channel multiplexer multiplexing the generated transport channels on a selected TTI basis to form a composite transport channel, the selected TTI being selected from one of the TTIs associated with the independently generated transport channels, the selected TTI being the lowest TTI of the independently generated transport channels; and
a mapping unit mapping the composite transport channel onto a physical channel.
12. (Currently Amended) A method of wireless uplink communication comprising:
mapping at least two transport channels within a physical channel;
multiplexing the at least two transport channels on a selected transmission time interval ("TTI") basis to form a composite transport channel, the selected TTI being selected from one of the TTIs associated with the at least two transport channels, the selected TTI being the lowest TTI of the independently generated transport channels.

13. (Original) The method of Claim 12, wherein each of the transport channels has a distinct transmission time interval ("TTI") associated thereto.
14. (Previously Presented) The method of Claim 12, wherein the at least two transport channels are generated for each transmission mode.
15. (Cancelled)
16. (Cancelled)
17. (Previously Presented) The method of claim 12, wherein the selected TTI is a minimum of the TTIs associated with the at least two transport channels.
18. (Original) The method of claim 14, wherein the transport channels are generated by generating at least a first and a second transport channel having first and second TTIs, and the second TTI is a multiple of the first TTI.
19. (Original) The method of claim 14, wherein the transmission mode associated with the first transport channel is a scheduled transmission mode and the transmission mode associated with the second transport channel is a autonomous transmission mode.
20. (Original) The method of claim 12, wherein the step of mapping maps the composite transport channel onto the physical channel on the selected TTI basis.